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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,831	03/18/2004	John R. Frank	113744.124 (US2)	5913
23483 7590 01/11/2007 WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			EXAMINER ONI, OLUBUSOLA	
			ART UNIT 2168	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/11/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/803,831	FRANK, JOHN R.	
	Examiner	Art Unit	
	OLUBUSOLA ONI	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/18/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Application filed on 03/18/2003

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Toshikazu Fukushima (Pub .No 20020031269) (hereinafter "Toshikazu").

For claim 1, Toshikazu teaches "in a large corpus, identifying geo-textual correlations among readings of the toponyms within the plurality of toponyms [0080]; and for each toponym selected from the plurality of toponyms, using the identified geo-textual correlations to generate a value for a confidence that the selected toponym refers to a corresponding geographic location ([0081] wherein for the overall computation Osaka earns the highest point in the document).

For claim 2, Toshikazu teaches "using the confidences generated for the plurality of toponyms to rank documents according to their relevance to a search query"([0079-0081] wherein ranking is been done by the number of appearance in the document and points are assigned accordingly)

For claim 3, Toshikazu teaches "selecting a set of initial values for the confidences for the plurality of toponyms, and wherein using the identified geo-textual correlations to

Art Unit: 2168

generate values for confidences involves modifying the set of initial values based on the identified geo-textual correlations within the corpus”(See paragraph [0079-0082])

For claim 4, Toshikazu teaches “selecting the set of initial values for the confidences for the plurality of toponyms involves using a method of uniform priors”(See paragraph [0079])

For claim 5, Toshikazu teaches “identifying geo-textual correlations involves identifying within documents in the corpus toponyms that have associated geographic locations that are nearby to each other.” (See paragraph [0079])

For claim 6, Toshikazu teaches “wherein identifying geo-textual correlations involves identifying spatial correlation among geographic references of toponyms that are in textual proximity”(See paragraph [0081] wherein Kinki-area and Kyoto are giving two points for appearing in a linked text)

For claim 7, Toshikazu teaches “wherein textual proximity means within the same document”(See paragraph [0081])

For claim 8, Toshikazu teaches “wherein textual proximity means within the same document or any document closely linked with said same document”(See paragraph [0080-0081] wherein the occurrence of Kinki-area or Kyoto can be within the same

document or liked document)

For claim 9, Toshikazu teaches “processing the corpus by a named entity tagger prior to identifying the geo-textual correlations”(See paragraph [0059]-[0063])

For claim 10 Toshikazu teaches “method of generating information useful for ranking a document that includes a plurality of toponyms for which there is a corresponding plurality of (toponym,place) pairs, there being associated with each (toponym,place) pair of said plurality of (toponym,place) pairs a corresponding value for a confidence that the toponym of that (toponym,place) pair refers to the place of that (toponym,place) pair, said method comprising ([0081]): for a selected (toponym,place) pair of the plurality of (toponym,place) pairs, determining if another toponym is present within the document that has an associated place that is geographically related to the place of the selected (toponym, place) pair (See paragraph [0005]-[0006]); and if a toponym is identified within the document that has an associated place that is geographically related to the place of the selected (toponym, place) pair, boosting the value of the confidence for the selected (toponym,place) pair”([0080-0081] wherein Osaka had the most appearances therefore boosting the value of confidence and scores the most points).

For claim 11, Toshikazu teaches “determining if another toponym is present within the document that has an associated place that is geographically related to the place of that

Art Unit: 2168

(toponym, place) pair involves identifying another toponym that has an associated geographic region that encompasses the place of the selected (toponym, place) pair” (See paragraph [0079]).

For claim 12, Toshikazu teaches “determining if another toponym is present within the document that has an associated place that is geographically related to the place of that (toponym, place) pair involves identifying another toponym that has an associated place that is geographically nearby the place of the selected (toponym, place) pair.”(See paragraph [0079])

For claim 13, Toshikazu teaches “computing a geographical distance between the place associated with the identified toponym and the place of the selected (toponym,place) pair”(See paragraph [0094-0098])

For claim 14, Toshikazu teaches “wherein boosting involves calculating an adjustment value by computing an adjustment boosting function with the computed geographical distance as an input variable, said adjustment function being monotonically decreasing for increasing values of the input variable”(See paragraph [0094-0098]).

For claim 15, Toshikazu teaches “wherein boosting involves deriving an initial boosting value from input including the calculated adjustment value”(See paragraph [0094-0096]).

For claim 16, Toshikazu teaches “wherein boosting involves applying a sigmoid function to the derived initial boosting value to compute a final boosting value and modifying the value of the confidence for the selected (toponym,place) pair by an amount determined by the final boosting value”(See paragraph [0098]).

For claim 17, Toshikazu teaches “performing steps (1) and (2) for each (toponym,place) pair among the plurality of (toponym,place) pairs to generate modified values for the confidences for the plurality of (toponym,place) pairs; and using the modified values to rank documents according to their relevance to a search query”(See paragraph [0079-0082]).

For claim 18, Toshikazu teaches “a method of evaluating relevance of a plurality of documents to a search query that includes both text and geographic place terms, said method comprising: for a selected document among the plurality of documents, computing a textual term relevance score corresponding to the text terms in the query (See paragraph [0080] wherein Osaka is regarded as the co-occurring word appearing in the most number of text); computing a geo-relevance score corresponding to the geographic terms in the query (See paragraph [0079] wherein Osaka makes the most appearance); and combining the computed textual term relevance score and the computed geo-relevance score to derive an overall relevance score for that document, wherein computing the geo-relevance for the selected document involves identifying a

Art Unit: 2168

plurality of (toponym,place) pairs that is associated with the selected document (See paragraph [0081] wherein for the overall computation Osaka earns the highest point in the document), and for each identified (toponym,place) pair, obtaining and using a value for a confidence that the toponym of the (toponym,place) pair refers to the place"(See paragraph [0079-0082]).

Art Unit: 2168

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUBUSOLA ONI whose telephone number is 571-272-2738. The examiner can normally be reached on 10.00-6.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OLUBUSOLA ONI *KBP*
Examiner
Art Unit 2168



TIM VO
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